

atis.—TYPE: dans la tourbière, Rivière la Loutre, Ile d'Anticosti, Quebec, 5 août, 1926, *Victorin & Rolland*, no. 25,167 (Gray Herb.).

This is the discoid form of typical *S. pauperculus* which, as pointed out by me¹ in 1921, is the northern extreme of the species, with very narrow basal and cauline leaves. The coarser and usually more southern variety also has a rayless form. This is

S. PAUPERCULUS, var. *BALSAMITAE* (Muhl.) Fernald, forma **inchoatus** n. f., capitulis eradiatis.—TYPE: talus of calcareous cliffs near Cape Rosier, Gaspé Co., Quebec, July 18, 1928, *A. S. Pease*, no. 20,918 (Gray Herb.).

GRAY HERBARIUM.

NOTES ON ASTER

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THE notes on *Aster* here brought together relate principally to species of the northwest coast which have been studied by the writer in the preparation of the treatment of the family *Asteraceae* for Prof. L. R. Abrams's "Illustrated Flora of the Pacific States." A new variety of *Aster spectabilis* from North Carolina is also described.

ASTER SPECTABILIS Ait. var. **cinerascens**, var. nov. Stems glabrate below; branches and peduncles densely cinereous-hirsute with several-celled spreading hairs, essentially without short glandular hairs; leaves more or less densely hirsute or hirsutulous on both sides, the hairs with small tuberculate bases; outer phyllaries hirsute-ciliate, on back hirsutulous, the middle and inner less pubescent or nearly glabrous except for the stipitate-glandular tips.—NORTH CAROLINA: In pure sand of road embankment, Kellum, Onslow Co., 17 Oct. 1927, *E. T. Wherry* (type no. 1,420,092, U. S. Nat. Herb.; duplicates in Gray Herb. and my own herbarium).

In typical *Aster spectabilis* Ait., as represented in the National Herbarium by a series of specimens ranging from Massachusetts to Maryland (Vienna, Wicomico Co., 1906, *Forrest Shreve & W. R. Jones* 1311a) and western North Carolina, the stem is densely stipitate-glandular and also sometimes sparsely hirsute, the peduncles very densely stipitate-glandular and often rather densely hirsute, the leaves ciliolate but otherwise usually glabrous or merely glandular and sparsely hirsutulous beneath, and the involucre densely stipitate-glandular with some of the outer phyllaries often pilose-ciliate. The specimens collected by Dr. Wherry represent the south-

¹ Fernald, *RHODORA*, xxiii. 299 (1921).

ernmost coastal locality definitely known for any form of the species and appear to constitute a well-marked variety which may prove to be of definite geographic range. They are remotely approached by a few specimens from farther north. In all Dr. Wherry's specimens the stems had been cut off not far above the ground and have been replaced by erect branches about a foot high.

ASTER MULTIFLORUS Ait. var. **pansus**, var. nov.—*Aster exiguus* Rydb. Bull. Torr. Club **28**: 505. 1901, as to descr., not as to name-bringing synonym.—Habit and abundant small heads, racemosely arranged along the branches, of *A. multiflorus*; stem and leaves densely spreading-hirsute or -hirsutulous; rays white.—Dry ground, Massachusetts to Washington and Oregon, south to Colorado, Texas and Missouri. Type from WASHINGTON: Along banks and in copses, Ellensburg, 23 Aug. 1898, *Kirk Whited* 853 (type no. 366,606, U. S. Nat. Herb.).

This is the commonest form of *Aster multiflorus* in Washington and Oregon, and is the plant that has passed for a number of years as *A. exiguus* (Fernald) Rydb. The only specimen of the typical form of *A. multiflorus* with appressed pubescence from the Pacific Coast States examined by the writer is *Elmer* 615, from meadows of the Sinlahekin Basin, Okanogan County, Washington. This specimen, kindly sent for examination by Dr. P. A. Rydberg from the herbarium of the New York Botanical Garden, is the basis of Dr. Rydberg's record of *A. stricticaulis* (T. & G.) Rydb. from Washington. *Aster stricticaulis* appears to me to be a mere phase, unworthy of specific or even varietal separation. It makes some approach to the true *A. multiflorus* var. *exiguus* of Fernald.¹ Examination of three sheets of the latter, kindly sent for study by Prof. Fernald (Prides Crossing, Mass., *Miss Jackson*; the cultivated plant from Nees; and Dedham, Mass., *C. E. Faxon*, the last marked "type" by Prof. Fernald) from the five mentioned in the original description, shows that the name *exiguus* was misapplied by Rydberg to the plant with spreading pubescence. In all three specimens the stem and leaves are strigose or strigillose, and the heads solitary or sometimes few and racemose at the tips of spreading somewhat flexuous branches. Var. *exiguus* seems to the writer a mere form or state of *A. multiflorus*, not requiring nomenclatorial distinction.

ASTER MULTIFLORUS var. **columbianus** (Piper).—*A. columbianus* Piper, Contr. U. S. Nat. Herb. **16**: 210. 1913.—Except in its violet

¹ RHODORA **1**: 187. 1899.

rays, this plant of Oregon and Washington does not differ notably from *A. multiflorus* Ait. I have seen only one (*Horner* 627) of the specimens cited by Piper. The type, *Horner* 559, said to be in the National Herbarium, has not been found.

ASTER glaucescens (Gray).—*Aster engelmannii* var. *glaucescens* Gray, Syn. Fl. 1²: 200. 1884. *Eucephalus glaucescens* Greene, Pittonia 3: 56. 1896. *Eucephalus glaucophyllus* Piper, Contr. U. S. Nat. Herb. 11: 570. 1906. *Aster glaucophyllus* Frye & Rigg, Northw. Fl. 385. 1912.—This plant of high elevations in the mountains of western Washington and Oregon is quite distinct specifically from *A. engelmannii* (D. C. Eaton) Gray. Piper's name *E. glaucophyllus* was given on the supposition that Gray's name was preoccupied by *Aster glaucescens* Wenderoth, but the latter occurs as a synonym only (of *Aster cyaneus* Hoffm. α *glaucus* (Hoffm.) Nees, Gen. & Sp. Asterac. 132. 1832) and so does not invalidate further use of the name. Gray (Syn. Fl. l. c. 183) cited "*Aster glaucescens*, Nees, Syn. 23. [1818]" as a synonym of *A. laevis* L., but this was an error, the species there published being *A. glaucus* Nees.

ASTER gormani (Piper).—*Eucephalus gormani* Piper, Proc. Biol. Soc. Washington 29: 101. 1916.—This species, related to *A. paucicapitatus* Robinson but distinct in its lower stature, merely stipitate-glandular stem and leaves, much broader (mainly ovate or oblongovate) phyllaries, and short rays, is known only from the type locality, Hanging Valley, Mt. Jefferson, Cascade Mountains, Oregon, altitude 1585 meters. A photograph and portions of the type are in the United States National Herbarium.

ASTER vialis (Bradshaw).—*Eucephalus vialis* Bradshaw, Torreyia 20: 122. 1921.—Related to *Aster ledophyllus* Gray, but distinguished by its discoid heads, linear or linear-lanceolate phyllaries, and stipitate-glandular, only sparsely pilose stem and lower leaf surface. The species is known only from rocky hillsides in the Willamette Valley, Oregon.

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